AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A method ~~of~~ for determining ~~the consumption of~~ oil consumption coming from ~~the~~ an oil separation system ~~(2)~~ located in ~~the~~ a circuit for recycling ~~the~~ blowby gases of an internal combustion engine, ~~characterized in that~~comprising:

- labeling the lubricating oil for said internal combustion engine ~~is labeled~~ by introducing at least one radioactive tracer into said lubricating oil;
- passing the blowby gases, leaving the engine block ~~(1)~~ and laden with lubricating oil~~, are made to pass~~ through ~~an~~ the oil separation system, ~~(2)~~ ~~where~~wherein at least some of the oil contained within said blowby gases is separated, collected and returned to ~~the~~ an oil sump ~~(6)~~;
- subsequently bringing ~~the oil not separated from~~ the blowby gases coming from the oil separation system ~~(2) is trapped~~to ~~in~~ an oil trapping device ~~(4)~~ located downstream of said oil separation system, whereby the oil not separated from the blowby gases coming from the oil separation system is retained in the oil trapping device ~~(2)~~;
- measuring the radioactivity of the oil ~~not separated in the oil separation system (2) and~~ retained in the oil trapping device ~~(4) is measured~~ by using a detector ~~(3)~~, which is placed near the oil trapping device ~~(4)~~ and is sensitive to the ionizing

radiation emitted by the radioactive tracer(s); and

- transmitting the results of these measurements ~~are sent~~ to a computer ~~(5)~~ capable of calculating the consumption of lubricating oil not separated in said separation system ~~(2)~~ from these results.

2. (currently amended): The method as claimed in claim 1, ~~characterized in that~~ wherein the oil separation system ~~(2)~~ comprises ~~consists of~~ several separators connected in series or in parallel.

3. (currently amended): The method as claimed in claim 1 ~~either of the preceding claims~~, ~~characterized in that~~further comprising releasing the blowby gases coming from the trapping device ~~(4) are released~~ into the atmosphere or ~~sent~~ to ~~the~~ an intake (D) of the internal combustion engine.

4. (currently amended): The method as claimed claim 1, ~~in any one of the preceding claims, characterized in that~~wherein the oil trapping device ~~(4)~~ is a second separation system comprising one or more static separation elements and/or one or more cyclones and/or one or more filtering elements.

5. (currently amended): The method as claimed in claim 1, ~~any one of the preceding claims, characterized in that~~ wherein the oil trapping device ~~(4)~~ is designed so that the pressure difference (ΔP) between the inlet of the oil separation system ~~(2)~~ and the outlet of the oil separation system ~~(2)~~ is substantially the same as the value of this pressure difference in

the absence of the trapping device.

6. (currently amended): The method as claimed in claim 1, ~~any one of the preceding claims, characterized in that~~wherein the radioactive tracer is an organic or mineral compound of a radioactive element.

7. (currently amended): The method as claimed in claim 1, ~~one of the preceding claims, characterized in that~~ wherein the radioactive element has a period, or half-life, of less than 3 years. ~~, preferably less than 1 year and in particular less than 30 days.~~

8. (currently amended): The method as claimed in claim 7, ~~characterized in that~~ wherein the radioactive element is selected from the group consisting of ~~chosen from~~ ^{22}Na, ^{65}Zn, ^{45}Ca, ^{35}S, ^{32}P, ^{47}Ca, ^{99}Mo, ^{82}Br, ^{64}Cu, ^{99m}Tc, ^{28}Mg, ^{68}Ge, ^{69}Ge, ^{77}Ge, ^{85}Sr and ^{56}Co.

9. (currently amended): The method as claimed in claim 8, ~~characterized in that~~ wherein the radio tracer is ~~chosen from~~ selected from the group consisting of tetra-alkylgermanes containing ^{69}Ge~~, preferably from tetrahexylgermane, tetraheptylgermane and tetraoctylgermane, or a mixture thereof~~.

10. (currently amended): The method as claimed in claim 8, ~~characterized in that~~ wherein the radio tracer is ^{99m}Tc~~, preferably in the form of an aqueous solution of sodium pertechnetate $NaTcO_4$ or in the form of nanoscale particles isolated from the atmosphere by carbon~~.

11. (currently amended): The method as claimed in claim 1 ~~any one of the preceding claims~~, ~~characterized in that~~ wherein the detector is an ionizing radiation detection probe.

12. (currently amended): A device for determining the consumption of oil coming from ~~the~~ an oil separation system ~~(2)~~ located in ~~the~~ a circuit for recycling ~~the~~ blowby gases of an internal combustion engine, ~~characterized in that it comprises~~comprising:

- an internal combustion engine lubricated by an oil labeled by introducing at least one radioactive tracer into said oil;
- an oil separation system ~~(2)~~ that receives the blowby gases laden with lubricating oil leaving the engine block ~~(1)~~, where at least some of the oil contained in said blowby gases is separated, collected and returned to the oil sump;
- downstream of the oil separation system ~~(2)~~, an oil trapping device ~~(4)~~;
- a detector ~~(3)~~ sensitive to the ionizing radiation emitted by the radioactive tracer(s), located in the immediate vicinity of the trapping device ~~(4)~~, so as to measure the radioactivity of the oil not Separated in the oil separation system ~~(2)~~ but retained in the oil trapping device ~~(4)~~; and
- connected to said detector ~~(3)~~, a computer ~~(5)~~ programmed for calculating the consumption of lubricating oil not separated in said separation system ~~(2)~~ from the results of the radioactivity measurements.

13. (currently amended): The device as claimed in claim 12, characterized in that the oil trapping device ~~(4)~~ is designed in such a way that the pressure difference (ΔP) between the inlet and the outlet of the oil separation system ~~(2)~~ is approximately the same as the

value of this pressure difference in the absence of said oil trapping device.

14. (new): .The method as claimed in claim 1, wherein the radioactive element has a period, or half-life, of less than 1 year.

15. (new): The method as claimed in claim 1, wherein the radioactive element has a period, or half-life, of less than 30 days.

16. (new): The method as claimed in claim 8, wherein the radio tracer is selected from the group consisting of tetrahexylgermane, tetraheptylgermane and tetraoctylgermane, and mixtures thereof.

17. (new): The method as claimed in claim 8, wherein the radio tracer is ^{99m}Tc in the form of an aqueous solution of sodium pertechnetate $NaTcO_4$ or in the form of nanoscale particles isolated from the atmosphere by carbon.